

**A New Invader—the Paper Wasp.**—It has always been understood that there are no Paper Wasps in southern Western Australia. It was therefore a matter of surprise when a nest was found attached to a building at the University, Crawley, some months ago. Later, the presence was confirmed by other reports from Subiaco, Crawley, King's Park, South Perth and East Fremantle.

On examination it was discovered that this social wasp, which had recently established itself in the metropolitan area, was a form of *Polistes*. As the necessary literature was not available in Perth specimens were sent to the Australian Museum, Sydney, where they were identified as *Polistes variabilis*, a species widely distributed in south-eastern Australia and Tasmania.

The wasps are about half an inch in length and variegated blackish and yellow. The head is black with yellow on the face, the thorax black with two narrow yellow crossbands and the abdomen yellow with a broad chestnut crossband near the base, the antennae and legs are ferruginous or russet. Queens and males can be distinguished by the antennae and the face pattern.

The study of an observation nest suggests that the insects are capable of surviving a Perth winter as a large number are still present (early July) near the nest in crevices and angles of the woodwork of a verandah.

Experience has shown that the insects are gentle and not at all pugnacious even if the nest is touched. A sting is not very painful, much less so than a bee sting.

The nest is mushroom-shaped with the stalk attached to the roof, not below, where there are to be seen the many openings of the cells, each of which during the season may contain an egg or grub. As a rule the cells are open but when the grub is about to pupate it closes the cell. It appears that the cells are used time after time, those of queens being larger than those destined to hold workers or males.

Whether the original queen travelled to Perth by air, land or boat cannot be decided. At any rate their presence in the metropolitan area shows how easily an insect pest may enter the State unobserved.

—L. GLAUERT, W.A. Museum, Perth.

**Influx of Red-capped Robins at Lower Chittering.**—While in conversation with Mr. Eric Schmidt some time ago, he told me of the sudden appearance, during April 1950, of numbers of Red-capped Robins (*Petroeca goodenovii*) at Lower Chittering, where he had not seen the species for many years. First noting a brilliant male in his orchard there on April 19, he very soon found the robins to be numerous and widely dispersed throughout the district.

More recently Mr. Schmidt informed me that the birds were under notice to about the end of June, after which no more was seen of them. The one male remained in his orchard for the greater part of this time. Remarkably enough, when visiting him on April 30, he pointed out this particular bird to me on the identical perch

—the top of an iron bar driven into the ground—on which he had first seen it eleven days before. On the date mentioned a soberly-clad companion was in the vicinity.

The presence of this dry-country or Eyrean form as a resident on Rottnest Island, while being entirely absent as such from the adjacent coastal plain and jarrah belt of the mainland, coupled with its post-summer penetrations into these more humid areas from the lower hinterland, presents no little problem to the student of bird geography.

In the fruit-growing areas within the heavily forested country at Bickley, it is not uncommon for one or two of these robins to put in an appearance during the autumn or early winter. Here, for a few days, or weeks, or even months, they take up residence in some selected spot whence, when the time comes, they vanish as suddenly as they appeared.

This year a young bird, if the absence of a trace of red even on the cap indicates such, appeared at an unusually early date, namely, February 12. After a day or two it settled down in a brook-side corner of one of the orchards, and here, on March 12, it was seen to have acquired a companion, likewise in brown plumage, but having a tinge of red on the cap. The two birds were seen together about this spot to May 23, after which no check was kept on them.

—W. H. LOARING, "Wood St. Mars," Bickley.

**Bowing Displays of Rufous Whistlers.**—Some of the bowing displays of Rufous Whistlers (*Pachycephala rufiventris*) seen by E. H. Sedgwick (*W.A. Naturalist*, vol. 2, 1950, p. 120) may have been territory disputes, not courtship displays. Courtship usually follows a long sequence of behaviour usually consisting of begging and baby cries, whisper song and clever, erratic, chasing flights throughout the territory. Bowing is sometimes seen with the baby cries, and also occasionally during the early stages of the mad chasings, when a female is loth to begin. The male then seems to be trying to intimidate her into flight by bowing and whistling close to her. A harsh emotional whistle is her response. This may be the "unfamiliar note" of the hen observed on October 7, 1943 by Sedgwick.

Territory disputes are usually conducted at certain places on the boundary, often between two or three particular trees between which the disputing birds conduct a continuous shuttling flight, back and forth. They rock and bow at these stations with much excited whistling. The note for September 1, 1948, seems to be an example of this. The note about a single bird in display on April 18, 1948, is almost certainly about the initiation or close of a territory dispute, for courtship is not then in evidence and territory disputes are common in autumn.

A knowledge of the boundaries of the territories of the birds concerned helps to decide the meaning of whistlers' behaviour since courtship is conducted within a territory, while territorial disputes are usually held on the boundary.